Scottish & Southern Electricity Networks

TRANSMISSION

Stornoway GSP Extension

Public Information Event

20 March 2025

ssen-transmission.co.uk/projects/project-map/stornoway-grid-supply-point-gsp-upgrade/

Contents

The Public Information Event will be taking place on:

Thursday 20 March, 3–7pm
Cabarfeidh Hotel, Stornoway, HS1 2EU

Powering change together

The time has come to further enhance Scotland's energy infrastructure, providing power for future generations as we move towards net zero.

The shift to a cleaner, more sustainable future is about more than climate change. It's about ensuring future generations have the same opportunities to thrive as we have all had.

Countries around the world are investing in their energy infrastructure to support the demands of modern economies and meet net zero targets. The UK is leading the way in building a modern, sustainable energy system for the future.

We all have a part to play

When it comes to net zero, we have to be in it together. The UK and Scottish governments have ambitious net zero targets, and we're playing our part in meeting them.

We work closely with the National Energy System Operator (NESO) (previously National Grid Electricity System Operator) to connect vast renewable energy resources—harnessed by solar, wind, hydro and marine generation—to areas of demand across the country. Scotland is playing a big role in meeting this demand, exporting two thirds of power generated in our network.

But there's more to be done. By 2050, the north of Scotland is predicted to contribute over 50GW of low carbon energy to help deliver net zero. Today, our region has around 9GW of renewable generation connected to the network.

At SSEN Transmission, it is our role to build the energy system of the future.

We're investing over £20 billion into our region's energy infrastructure this decade, with the potential for this to increase to over £30 billion. This investment will deliver a network capable of meeting 20% of the UK's Clean Power 2030 target and supporting up to 37,000 jobs, 17,500 of which will be here in Scotland.

Scan the QR code with your smartphone to find out more about how these policies have been assessed and determined.

Who we are

We're responsible for maintaining and investing in the electricity transmission network in the north of Scotland. We're part of SSE plc, one of the world's leading energy companies with a rich heritage in Scotland that dates back more than 80 years. We are also closely regulated by the GB energy regulator Ofgem, who determines how much revenue we are allowed to earn for constructing, maintaining and renovating our transmission network.

What we do

We manage the electricity network across our region which covers a quarter of the UK's land mass, crossing some of the country's most challenging terrain. We connect renewable energy sources to our network in the north of Scotland and then transport it to where it needs to be. From underground/subsea cables and overhead lines to electricity substations, our network keeps your lights on all year round.

Working with you

We understand that the work we do can have an impact on communities. So we're committed to minimising our impacts and maximising all the benefits that our developments can bring to your area. We're regularly assessed by global sustainability consultancy AccountAbility for how we engage with communities. That means we provide all the information you need to know about our plans and how they will impact communities like yours. The way we consult is also a two-way street. We want to hear people's views, concerns, or ideas and harness local knowledge so that our work benefits their communities: today and long into the future. You can share your views with us at: **ssen-transmission.co.uk/talk-to-us/contact-us/**

The Pathway to 2030

Building the energy system of the future will require delivery of significant infrastructure over the next few years. In partnership with the UK and Scottish governments, we're committed to meeting our obligation of connecting new, renewable energy to where it's needed by 2030.

Achieving Net Zero

By 2030, both the UK and Scottish governments are targeting a big expansion in offshore wind generation of 50GW and 11GW respectively. The Scottish Government has also set ambitious targets for an additional 12GW of onshore wind by 2030.

Across Great Britain, including the north of Scotland, there needs to be a significant increase in the capacity of the onshore electricity transmission infrastructure to deliver these 2030 targets and a pathway to net zero.

Securing our energy future

And it's not just about net zero. It's also about building a homegrown energy system, so that geopolitical turmoil around the world doesn't severely impact the UK and push up energy prices.

The UK Government's British Energy Security Strategy further underlines the need for this infrastructure, setting out plans to accelerate homegrown power for greater energy independence. The strategy aims to reduce the UK's dependence on and price exposure to global gas wholesale markets through the deployment of homegrown low carbon electricity generation supported by robust electricity network infrastructure.

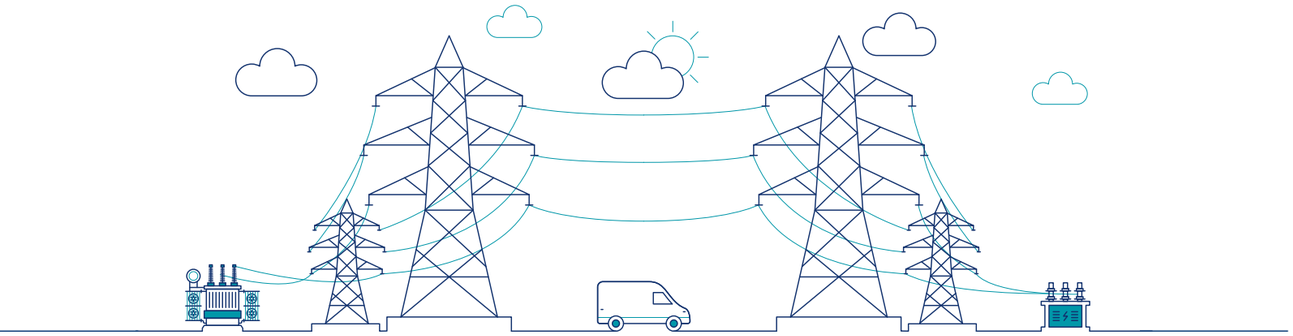
Meeting our 2030 targets

In July 2022, National Grid, the Electricity System Operator (ESO), published the Pathway to 2030 Holistic Network Design (HND). This set out the blueprint for the onshore and offshore transmission infrastructure that's required to support the forecasted growth in the UK's renewable electricity. It's an ambitious plan that will help the UK achieve net zero.

What does this mean for you?

The Stornoway Grid Supply Point (GSP) Extension Project aims to connect increased generation on the SSEN Distribution network (due to the connection of Druim Leathann Wind Farm and Battery Point Battery Energy Storage Scheme (BESS)) to the wider GB Transmission system. To ensure there is sufficient capacity on the SSEN Transmission Network for this future generation, an extension of the Stornoway GSP site is required to accommodate the installation of additional electrical infrastructure. This additional electrical infrastructure then connects to the Lewis Hub to allow the increased generation to reach the wider GB Transmission Network.

The Lewis Hub is being developed as part of a separate project which aims to connect onshore and offshore wind in and around the Western Isles to the mainland transmission system, maximising the significant renewable potential of the Western Isles, adding capacity for new connections and reducing the island's reliance on diesel-powered electricity generation.

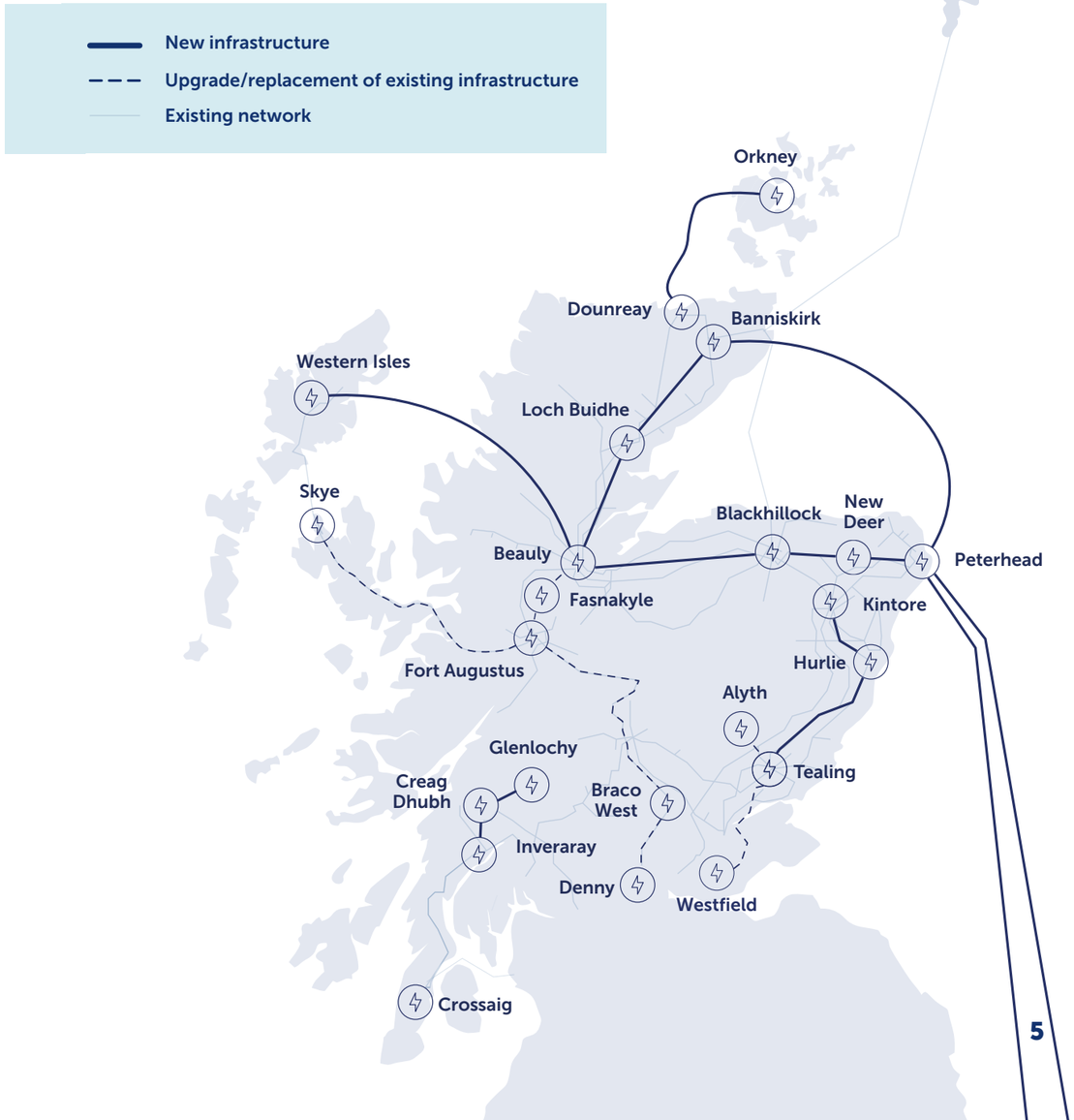


Future network investment requirements

Our 2030 targets are the first step on the transition to net zero. The UK Government has a target to decarbonise our electricity system by 2035 and fully decarbonise our economy by becoming net zero by 2050, with the Scottish Government committing to net zero five years earlier, by 2045.

To achieve these targets, further investment in new low carbon electricity generation and the enabling electricity transmission network infrastructure will be required.

The next stage of strategic network planning across Great Britain has now been outlined in the independent Electricity System Operator, National Grid ESO's, 'Beyond 2030' report, published in March this year. For the north of Scotland, the ESO's plan recommends several new and upgraded onshore and offshore reinforcements that the ESO has assessed are required to help deliver net zero targets. These projects, which will be subject to extensive public consultation, are at the very early stages of development and further details will be set out in due course.



Project need and overview

As the transmission license holder in the north of Scotland, we have a duty under Section 9 of the Electricity Act 1989 to facilitate competition in the generation and supply of electricity. We have obligations to offer non-discriminatory terms for connection to the transmission system, both for new generation and for new sources of electricity demand.

As explained above, we are required to connect the increased generation from Druim Leathann Wind Farm and Battery Point BESS to the transmission network. To facilitate this, it is necessary to extend the existing GSP site to accommodate the installation of two new grid transformers, along with their associated electrical equipment and buildings, and connect these new grid transformers to the Lewis Hub via underground cable.

Under our Network Operators License, this connection should be efficient, coordinated and economic, whilst having the least possible impact on the environment.

The proposed works for Stornoway GSP Extension include:

The proposal involves civil works to expand the existing GSP platform, including earthworks, drainage, and upgrades to the access road, to allow the installation of two transformers within two new dedicated buildings. The construction of a new control building to house upgraded protection and control systems is required and we plan to decommission the existing transformer, it's building and associated control building. Two sections of underground cable, approx. 500m in length, will be installed to connect the new transformers to Lewis Hub on the Arnish Moor. The location of the planned Lewis Hub is in close proximity to the existing GSP, and so it was deemed technically inappropriate to site these proposed works at an alternative site.

At this stage of the project, the substation platform extension design is in its infancy, however it is expected that the platform will extend to the Southwest of the existing site and to the West. The transformer buildings will likely reach 12.5m in height.

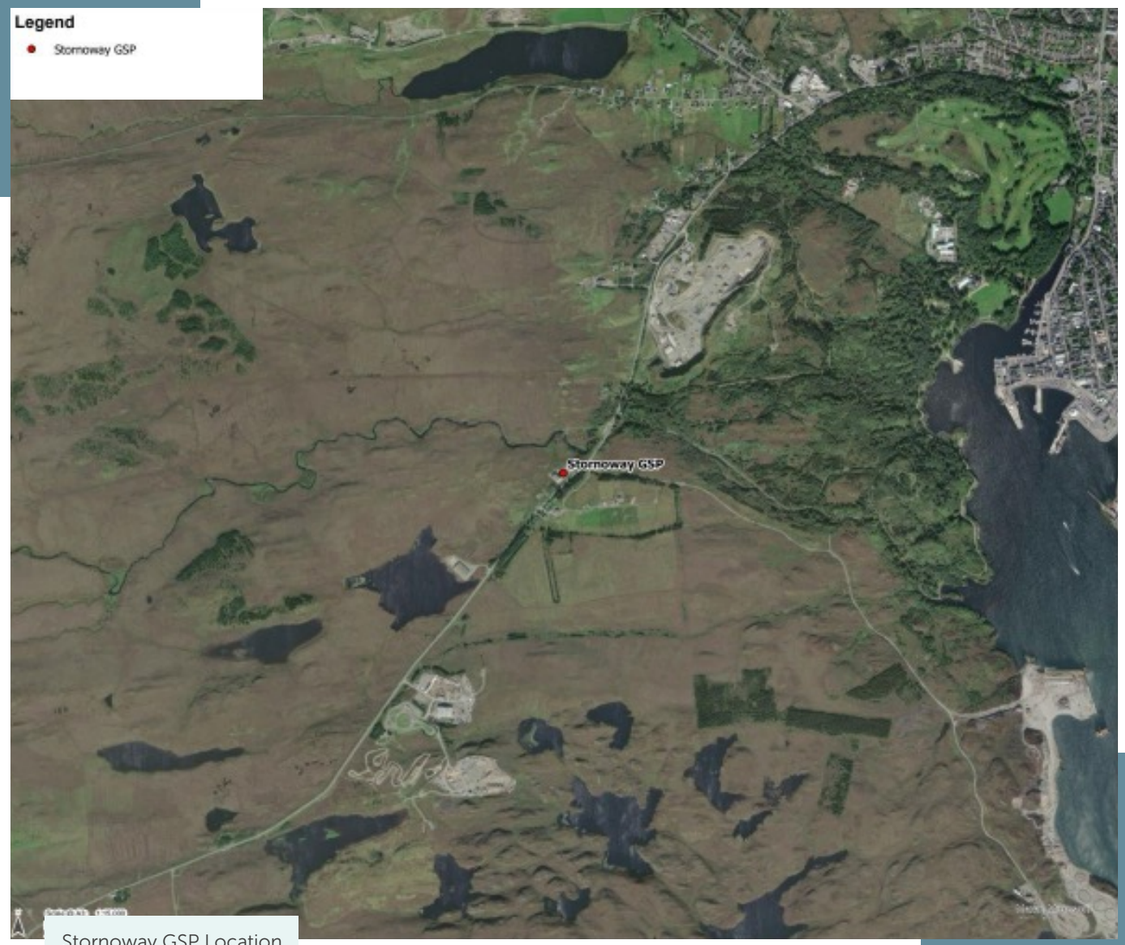
Traffic management may be required during construction and consultation will be undertaken on this in due course.

Stornoway GSP

Optioneering for the GSP Extension

The planned extension of the existing Stornoway GSP aims to increase capacity to support new connection projects and enhance the resilience of the local electricity network.

The project team is currently evaluating various layout options for the extension, taking into account environmental considerations, landscape and visual impacts, and technical feasibility. A thorough assessment process is underway to ensure the most suitable and sustainable solution is identified.



Stornoway GSP Location

Existing Stornoway GSP Site

To accommodate the increase in electricity demand and network capacity, the Stornoway GSP is planned to be extended. The project will involve the installation of two new grid transformers, which will be housed within air-insulated switchgear (AIS) buildings. Additionally, a new control room and welfare facility will be constructed as part of the development.

During the early project stages, both a new substation site and an extension of the existing Stornoway GSP were considered as potential options. Initial assessments have shown that extending the existing site is the only viable option both from an environmental impact and engineering perspective.

Options to extend the existing substation are being considered to the West and Southwest as indicated in the accompanying figures. The design to extend the substation will prioritise an economical approach, optimising the required footprint while minimising both visual impact and disturbance to the surrounding peatland.

Further optioneering workshops and design development for the Stornoway GSP extension is scheduled to take place during 2025. Initial concept designs will be shared with the public as part of our ongoing engagement process.

Option to extend substation West and Southwest

Option to extend substation predominantly to the Southwest

Development Considerations

We will consider engineering, environmental and social considerations to optimise siting of the GSP extension. This will be through a combination of desk-based assessment and site visits.

Environmental assessments

Any key environmental issues will be identified including; landscape and visual amenity, noise, sensitive habitats, protected ecology and ornithology, hydrology, hydrogeology, recreation and cultural heritage. Following the confirmation of the preferred layout for the GSP extension, further detailed studies and assessments will be completed to support the consenting process.

Consenting

Before the project progresses to the consent application stage and depending on its scale and nature, an Environmental Impact Assessment (EIA) 'Screening' needs to be undertaken. If the project meets or exceeds certain criteria, then it is deemed to be an EIA Development and any application for consent must be accompanied by a formal EIA Report. If it is not an EIA Development, we will provide equivalent, proportionate environmental information through a voluntary Environmental Appraisal (EA) Report.

Noise

A noise impact assessment will be commissioned to appropriately inform the planning submission. This will include baseline noise monitoring surveys at noise sensitive receptors within the vicinity of the site to inform an operational noise assessment. Appropriate mitigation measures will be considered dependent on the results of the assessment.

Local wildlife and ecology

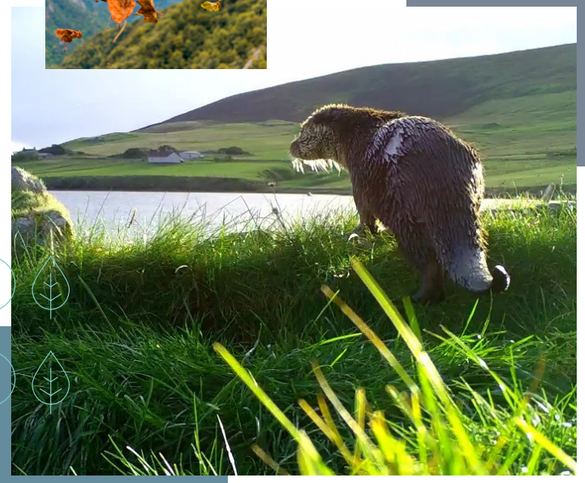
The surrounding area has been surveyed to identify habitats and protected species including birds. The proposed development will seek to maintain and enhance any protected habitats which would be impacted by the proposed design. At this stage, no significant effects are anticipated as a result of the GSP extension. Ecology and habitat appraisals are underway and will be reported alongside any relevant mitigation measures.

Water/water soils and drainage

The following hydrological aspects are being considered as part of the site selection process for the GSP extension: Private Water Supplies, Groundwater dependent terrestrial ecosystems (GWDTE's), flood risk potential and soils and peat.

An appropriate site drainage plan for both the construction and operational phases will be developed to ensure no adverse impacts on the surrounding water environment.

Construction Environmental and Pollution Management Plans will be prepared prior to construction to include the management and mitigation for sediment, dust, runoff and waste generated during construction.



Material cut/extraction

In order to provide a level platform alongside the existing substation platform; a volume of site material including carbon (peat) soils is required to be cut/removed and redistributed locally, in agreement with SEPA as regulator.

Traffic & Access

The construction of the GSP extension will require vehicles to deliver plant, machinery and workers to the site. It is anticipated the existing established routes will be used. An appropriate construction traffic management plan will be developed to ensure road safety for all other road users during the construction works including suitable management of all abnormal loads and vehicle movements.

Landscape and visual

The appearance and character of the landscape is already influenced by electrical infrastructure, including the existing Stornoway GSP and overhead lines. A landscape and visual impact assessment will be carried out to understand how the GSP extension will be viewed within the surrounding area, to identify any significant effects and propose recommendations to mitigate these effects. The assessment will be included in support of the planning application.

Cultural heritage

A walkover survey of the site and surrounding area has been undertaken to understand any potential effects on the historic environment. Potential effects will be appraised and reported as part of the environmental assessment which will be submitted as part of the planning application. There are no designated assets identified within the proposed development boundary. Consultation will be carried out with Comhairlie nan Eilean Siar to identify any on-site archaeological investigation that would be required before construction works commence, and if required a Written Scheme of Investigation would be prepared which would set out a strategy for archaeological mitigation in advance of the construction works.

Stornoway GSP Extension

Project timeline

March 2025
- Information shared on GSP Extension

Winter 2025
- Environmental Impact Assessment commences

Spring 2026
- Public consultation

Summer 2026
- Submission of planning application

Spring 2027
- Planning consent determination

Spring 2028
- Construction commences (subject to gaining consent)

Winter 2030
- Project Completion

Have your say

We understand and recognise the value of feedback provided by the community and stakeholders. Without this valuable feedback, we would be unable to progress projects and reach a balanced proposal.

The Feedback Period

We will accept feedback from now until **1 May 2025.**

How to provide feedback

Submit your feedback online by scanning the QR code on this page or via the form on our project webpage at:
ssen-transmission.co.uk/projects/project-map/stornoway-grid-supply-point-gsp-upgrade/

Email the feedback form to the Community Liaison Manager. Or write to us enclosing the feedback form at the back of this booklet.

Our Community Liaison team

Each project has a dedicated Community Liaison Manager who works closely with community members to make sure they are well informed of our proposals and that their views, concerns, questions or suggestions are put to our project teams.

Throughout the life of our projects, you will hear from us regularly. We aim to establish strong working relationships by being accessible to key local stakeholders such as community councils, residents' associations and development trusts, and regularly engage with interested individuals.

Recite me

To support everyone online, we provide accessibility and language options on our website through 'Recite Me'. The accessibility and language support options provided by 'Recite Me' include text-to-speech functionality, fully customisable styling features, reading aids, and a translation tool with over 100 languages, including 35 text-to-speech.

Please select "Accessibility" on our website to try out our inclusive toolbar."

What we're seeking views on

We are seeking your thoughts on the GSP extension options under consideration. We'll be actively looking to mitigate the impacts of the extension as much as possible over the coming months, but it would be helpful to understand what you believe we should be doing to help minimise these impacts and if there are any opportunities to deliver a local community benefit you would like us to consider. We encourage all interested community members to fill in a feedback form when submitting feedback, however if you prefer, you can email us to provide your feedback or ask any questions.

Community Liaison Manager

Kevin Morrison

SSEN Transmission, Battery Point, Stornoway, Outer Hebrides, HS1 2RT

07586 237 814

kevin.morrison@sse.com

Additional information:

The best way to keep up to date is to sign up to project updates via the project webpage:
ssen-transmission.co.uk/projects/project-map/stornoway-grid-supply-point-gsp-upgrade/

You can also follow us on social media:

@ssentransmission @SSETransmission

NB: Comments made through the information feedback process are not formal representations to the Comhairle Nan Eilean Siar. When the planning application is submitted there will be an opportunity to make formal representations to the Comhairle Nan Eilean Siar.

Your feedback

Thank you for taking the time to read this information booklet. In order to record your views and improve the effectiveness of our communications, please complete this short feedback form.

Please complete in BLOCK CAPITALS. (Please tick one box per question only)

Q1. Do you feel sufficient information has been provided to enable you to understand what is being proposed and why?

☐ Yes ☐ No ☐ Unsure

Comments:

Q2. Have we adequately explained the need for the Stornoway GSP Extension?

☐ Yes ☐ No ☐ Unsure

Comments:

Q3. Are there any factors, or environmental features, that you consider may have been overlooked during the site selection process?

☐ Yes ☐ No ☐ Unsure

Comments:

Q4. **Do you have any other comments (positive or negative) or concerns in relation to the project?**

Comments:

Full name: ..... **Email:** .....

Telephone: ..... **Address:** .....

We would like to send you relevant communications via email such as invitations to stakeholder events, surveys, updates on projects, services and future developments from the Scottish and Southern Electricity Networks group listed below. If you are happy to receive email updates please opt in by ticking the box below. You can unsubscribe at any time by contacting us at stakeholder.admin@sse.com or by clicking on the unsubscribe link that will be at the end of each of our emails.

☐ **If you would like to be kept informed of progress on the project, please tick this box**

Thank you for taking the time to complete this feedback form.
Please submit your completed form by one of the methods below:

Post: SSEN Transmission, Battery Point, Stornoway, Outer Hebrides, HS1 2RT

Email: kevin.morrison@sse.com

Online: https://www.ssen-transmission.co.uk/projects/project-map/stornoway-grid-supply-point-gsp-upgrade/

For information on how we collect and process your data please see our privacy notice available at today's event. This can also be obtained online at: ssen-transmission.co.uk/privacy

Comments forms and all the information from today's event will also be available to download from the project website.

We intend to use Artificial Intelligence (AI) to assist our experienced teams in the analysis of your feedback, so we can categorise key points raised more quickly. You can learn more about how we're utilising AI at: ssen-transmission.co.uk/AIFAQ

Any information given on the feedback form can be used and published anonymously as part of Scottish and Southern Electricity Networks consultation report. By completing this feedback form you consent to Scottish and Southern Electricity Networks using feedback for this purpose.